

NORTHEASTERN WEED SCIENCE SOCIETY 2024 COLLEGIATE WEED SCIENCE CONTEST
WEED IDENTIFICATION LIST

Source for naming convention: Weeds of the Northeast, 2nd ed.

Corrected 6/17/24

Corrected scientific
name for Italian ryegrass

Added horseweed

Spore-producing plants

	<u>Equisetaceae</u>	<u>Horsetail Family</u>
1	<i>Equisetum arvense</i>	field horsetail

Monocots

	<u>Cyperaceae</u>	<u>Sedge Family</u>
2	<i>Cyperus esculentus</i>	yellow nutsedge
	<u>Poaceae (Gramineae)</u>	<u>Grass Family</u>
3	<i>Digitaria ischaemum</i>	smooth crabgrass
4	<i>Digitaria sanguinalis</i>	large crabgrass
5	<i>Echinochloa crus-galli</i>	barnyardgrass
6	<i>Eleusine indica</i>	goosegrass
7	<i>Elymus repens</i>	quackgrass
8	<i>Lolium multiflorum</i>	Italian ryegrass
9	<i>Microstegium vimineum</i>	Japanese stiltgrass
10	<i>Panicum capillare</i>	witchgrass
11	<i>Panicum dichotomiflorum</i>	fall panicum
12	<i>Phragmites australis</i>	common reed
13	<i>Poa annua</i>	annual bluegrass
14	<i>Setaria faberi</i>	giant foxtail
15	<i>Setaria pumila</i>	yellow foxtail
16	<i>Sorghum bicolor</i>	shattercane
17	<i>Sorghum halepense</i>	johnsongrass
18	<i>Urochloa texana</i>	Texas panicum

Dicots

	<u>Amaranthaceae</u>	<u>Amaranth (Pigweed) Family</u>
19	<i>Amaranthus palmeri</i>	Palmer amaranth
20	<i>Amaranthus retroflexus</i>	redroot pigweed
	<u>Apiaceae</u>	<u>Parsley Family</u>
21	<i>Anthriscus sylvestris</i>	wild chervil
22	<i>Conium maculatum</i>	poison hemlock
23	<i>Daucus carota</i>	wild carrot
	<u>Apocynaceae</u>	<u>Dogbane Family</u>
24	<i>Apocynum cannabinum</i>	hemp dogbane

	Apocynaceae	<u>Dogbane Family</u>
25	<i>Asclepias syriaca</i>	common milkweed
26	<i>Cynanchum rossicum</i>	pale swallowwort
	Asteraceae	<u>Aster Family</u>
27	<i>Achillea millefolium</i>	common yarrow
28	<i>Ambrosia artemisiifolia</i>	common ragweed
29	<i>Ambrosia trifida</i>	giant ragweed
30	<i>Anthemis cotula</i>	mayweed chamomile
31	<i>Arctium minus</i>	common burdock
32	<i>Artemisia vulgaris</i>	mugwort
33	<i>Centaurea stoebe</i>	spotted knapweed
34	<i>Cirsium arvense</i>	Canada thistle
35	<i>Cirsium vulgare</i>	bull thistle
36	<i>Conyza canadensis</i>	horseweed
38	<i>Galinsoga quadriradiata</i>	hairy galinsoga
39	<i>Lactuca serriola</i>	prickly lettuce
40	<i>Senecio vulgaris</i>	common groundsel
41	<i>Solidago canadensis</i>	Canada goldenrod
42	<i>Sonchus asper</i>	spiny sowthistle
43	<i>Taraxacum officinale</i>	dandelion
44	<i>Xanthium strumarium</i>	common cocklebur
	Brassicaceae	<u>Mustard Family</u>
45	<i>Alliaria petiolata</i>	garlic mustard
46	<i>Barbarea vulgaris</i>	yellow rocket
47	<i>Capsella bursa-pastoris</i>	shepherd's-purse
48	<i>Lepidium virginicum</i>	Virginia pepperweed
49	<i>Raphanus raphanistrum</i>	wild radish
50	<i>Sinapis arvensis</i>	wild mustard
	<i>Thlaspi arvense</i>	field pennycress
	Caprifoliaceae	<u>Honeysuckle Family</u>
51	<i>Lonicera tatarica</i>	Tatarian honeysuckle
	Caryophyllaceae	<u>Pink Family</u>
52	<i>Cerastium fontanum</i> ssp. <i>vulgare</i>	mouseear chickweed
53	<i>Silene latifolia</i>	white campion
54	<i>Stellaria media</i>	common chickweed
	Chenopodiaceae	<u>Goosefoot Family</u>
55	<i>Chenopodium album</i>	common lambsquarters

	Convolvulaceae	<u>Morningglory Family</u>
56	<i>Calystegia sepium</i>	hedge bindweed
57	<i>Convolvulus arvensis</i>	field bindweed
58	<i>Ipomoea hederacea</i>	ivyleaf morningglory
59	<i>Ipomoea purpurea</i>	tall morningglory
	Cucurbitaceae	<u>Gourd Family</u>
60	<i>Eupatorium capillifolium</i>	dogfennel
61	<i>Sicyos angulatus</i>	burcucumber
	Dipsacaceae	<u>Teasel Family</u>
62	<i>Dipsacus fullonum</i>	common teasel
	Euphorbiaceae	<u>Spurge Family</u>
63	<i>Euphorbia maculata</i>	spotted spurge
	Fabaceae (Leguminosae)	<u>Pea (Bean) Family</u>
64	<i>Medicago lupulina</i>	black medic
65	<i>Trifolium repens</i>	white clover
	Haloragaceae	<u>Watermilfoil Family</u>
66	<i>Myriophyllum spicatum</i>	Eurasian watermilfoil
	Hydrocharitaceae	<u>Frog's-bit Family</u>
67	<i>Hydrilla verticillata</i>	hydrilla
	Lamiaceae	<u>Mint Family</u>
68	<i>Glechoma hederacea</i>	ground ivy
69	<i>Lamium amplexicaule</i>	henbit
70	<i>Lamium purpureum</i>	purple deadnettle
	Lythraceae	<u>Loosestrife Family</u>
71	<i>Lythrum salicaria</i>	purple loosestrife
	Malvaceae	<u>Mallow Family</u>
72	<i>Abutilon theophrasti</i>	velvetleaf
73	<i>Anoda cristata</i>	spurred anoda
74	<i>Hibiscus trionum</i>	Venice mallow
75	<i>Malva neglecta</i>	common mallow
76	<i>Sida spinosa</i>	prickly sida
	Oxalidaceae	<u>Woodsorrel Family</u>
77	<i>Oxalis stricta</i>	yellow woodsorrel

	Phytolaccaceae	<u>Pokeweed Family</u>
78	<i>Phytolacca americana</i>	common pokeweed
	Plantaginaceae	<u>Plantain Family</u>
79	<i>Linaria vulgaris</i>	yellow toadflax
80	<i>Plantago lanceolata</i>	buckhorn plantain
81	<i>Plantago major</i>	broadleaf plantain
82	<i>Veronica arvensis</i>	corn speedwell
83	<i>Veronica peregrina</i>	purslane speedwell
	Polygonaceae	<u>Buckwheat Family</u>
84	<i>Fallopia convolvulus</i>	wild buckwheat
85	<i>Fallopia japonica</i>	Japanese knotweed
86	<i>Persicaria maculosa</i>	ladysthumb
87	<i>Polygonum aviculare</i>	prostrate knotweed
88	<i>Rumex acetosella</i>	red sorrel
89	<i>Rumex crispus</i>	curly dock
90	<i>Rumex obtusifolius</i>	broadleaf dock
	Portulacaceae	<u>Purslane Family</u>
91	<i>Portulaca oleracea</i>	common purslane
	Rosaceae	<u>Rose Family</u>
92	<i>Rosa multiflora</i>	multiflora rose
	Ranunculaceae	<u>Buttercups Family</u>
93	<i>Ranunculus acris</i>	tall buttercup
	Rhamnaceae	<u>Buckthorn Family</u>
94	<i>Rhamnus cathartica</i>	European buckthorn
	Rubiaceae	<u>Madder Family</u>
95	<i>Galium aparine</i>	catchweed bedstraw
96	<i>Galium mollugo</i>	smooth bedstraw
	Solanaceae	<u>Nightshade Family</u>
97	<i>Datura stramonium</i>	jimsonweed
98	<i>Physalis longifolia var. subglabrata</i>	smooth groundcherry
99	<i>Solanum carolinense</i>	Carolina horsenettle
100	<i>Solanum physalifolium</i>	hairy nightshade
101	<i>Solanum ptychanthum</i>	eastern black nightshade

2024 Unknown Herbicide CROP-WEED list

List of Crops (planted from seed unless otherwise noted)

- 1 Alfalfa
- 2 Canola
- 3 Corn, field
- 4 Pumpkins
- 5 Peas and/or snap beans
- 6 Soybean
- 7 Sunflower
- 8 Wheat
- 9 Grain sorghum
- 10 Potato or tomato

List of Weeds

- 1 Barnyardgrass
- 2 Crabgrass, large
- 3 Foxtail, giant
- 4 Foxtail, yellow (optional)
- 5 Pigweed (*Amaranthus*) species
- 6 Lambsquarters, common
- 7 Velvetleaf
- 8 Morningglory (*Ipomoea*) spp.
- 9 Nutsedge, yellow

NEWSS COLLEGIATE WEED CONTEST – 2024

No.	Herbicide	Familiar Trade Names	Herbicide Family	Mode of Action	Site of Action Group	
					WSSA/ HRAC	Application Timing
1	Clethodim	Select Max/Envoy	cyclohexanedione	ACCase inhibitor	1	POST
2	Chlorimuron	Classic	sulfonylurea	ALS inhibitor	2	POST
3	Halosulfuron	Permit/Sandea/Sed gehammer	sulfonylurea	ALS inhibitor	2	POST
4	Nicosulfuron	Accent	sulfonylurea	ALS inhibitor	2	POST
5	Thifensulfuron	Harmony	sulfonylurea	ALS inhibitor	2	POST
6	Imazethapyr	Pursuit	imidazolinone	ALS inhibitor	2	POST
7	Pendimethalin	Prowl /Pendulum	dinitroaniline	Microtubule assembly inhibitor	3	PRE
8	S-metolachlor	Dual II Magnum / Pennant Magnum	chloroacetamide	VLCFA synthesis inhibitor	15	PRE
9	2,4-D	Various	phenoxy-carboxylate	Auxin mimics	4	POST
10	Dicamba	Clarity	benzoate	Auxin mimics	4	POST
11	Atrazine	Aatrex	triazine	Photosystem II inhibitor	5	PRE
12	Metribuzin	Sencor	triazinone	Photosystem II inhibitor	5	PRE
13	Bentazon	Basagran	benzothiadiazinone	Photosystem II inhibitor	6	POST
14	Bromoxynil	Buctril	nitrile	Photosystem II inhibitor	6	POST
15	Glyphosate	Various	glycine	EPSPS inhibitor	9	POST
16	Glufosinate	Liberty /Finale	phosphinic acid	Glutamine synthetase inhibitor	10	POST
17	Clomazone	Command	isoxazolidinone	DXPS inhibitor	13	PRE
18	Flumioxazin	Valor/Sureguard	N-phenyl-imide	PPO inhibitor	14	PRE
19	Fomesafen	Reflex	diphenyl ether	PPO inhibitor	14	POST
20	Saflufenacil	Sharpen	N-phenyl-imide	PPO inhibitor	14	PRE
21	Paraquat	Gramoxone SL	pyridinium	Photosystem I electron diversion	22	POST
22	Isoxaflutole	Balance Flexx	isoxazole	HPPD inhibitor	27	PRE
23	Mesotrione	Callisto	triketone	HPPD inhibitor	27	POST
24	Topramezone	Impact/Frequency	pyrazole	HPPD inhibitor	27	POST
25	Indaziflam	Alion/Marengo/Specticle	alkylazine	Cellulose synthesis inhibitor	29	PRE

No.	Herbicide	Familiar Trade Names	Application Timing	Use rate		
				Formulation	Per Acre	Per Hectare
1	Clethodim	Select Max	POST	1 EC	1 pt	1170 mL
2	Chlorimuron	Classic	POST	25 WG	0.5 oz	35 g
3	Halosulfuron	Permit/Sandea	POST	75 WG	0.67 oz	46.9 g
4	Nicosulfuron	Accent	POST	75 DF	0.67 oz	47 mL
5	Thifensulfuron	Harmony	POST	50 SG	0.5 oz	35 mL
6	Imazethapyr	Pursuit	POST	2 AS	4 fl oz	292 mL
7	Pendimethalin	Prowl H ₂ O	PRE	3.8 SC	3 pt	3510 mL
8	s-Metolachlor	Dual II Magnum	PRE	7.64 E	1.33 pt	1560 mL
9	2,4-D	Various	POST	4 lb/gal amine	1 pt	1170 mL
10	Dicamba	Clarity	POST	4 S	0.5 pt	580 mL
11	Atrazine	Aatrex	PRE	4 L	1 qt	2.34 L
12	Metribuzin	Sencor	PRE	75 DF	0.5 lb	56 g
13	Bentazon	Basagran	POST	4 L	1 qt	2340 mL
14	Bromoxynil	Buctril	POST	2 EC	1.5 pt	1750 mL
15	Glyphosate	Roundup PowerMax	POST	4.5 lb ae/gal	22 fl oz	1610 mL
16	Glufosinate	Liberty 280 SL	POST	2.34 SL	29 fl oz	2122 mL
17	Clomazone	Command	PRE	3 ME	1 pt	1170 mL
18	Flumioxazin	Valor SX	PRE	51 WDG	3 oz	210.2 g
19	Fomesafen	Reflex	POST	2 LC	1 pt	1170 mL
20	Saflufenacil	Sharpen	PRE	2.85 SC	2.5 fl oz	183 mL
21	Paraquat	Gramoxone SL	POST	2 L	1 qt	2340 mL
22	Isoxaflutole	Balance Flexx	PRE	2 SC	3 fl oz	219 mL
23	Mesotrione	Callisto	POST	4 SC	3 fl oz	219 mL
24	Topramezone	Impact	POST	2.8 SC	0.75 fl oz	55 mL
25	Indaziflam	Alion	PRE	1.67 SC	3.5 fl oz	256 mL

NOTE: Application rates are in amount of product per acre/hectare; appropriate adjuvants will be added to POST applications.